

Identity of a Sugar Cane Pest, *Scolecocampa mochisa* (Schaus), in Mexico, and a New Generic Synonym (Lepidoptera: Noctuidae)

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ABSTRACT A sugar cane pest in Mexico, *Scolecocampa mochisa* (Schaus) (new combination), was originally described in the monotypic genus *Saccharophagos* Schaus (1923), which is considered a new synonym of *Scolecocampa* Guenée (1852). The adult and larva are illustrated. The genitalia, egg, and pupa are described and illustrated. The closely related species, *Scolecocampa stygialis* (Smith), is a new combination.

KEY WORDS *Scolecocampa*, sugar cane, pest, egg, larva, pupa

SCHAUS DESCRIBED A new genus and species, *Saccharophagos mochisa*, a catocaline noctuid that had been reared from sugar cane in northwestern Mexico (1923). In 1999, I received two additional specimens for identification from Sinaloa, Mexico, and in 2000, several additional specimens from Jalisco.

The genitalia of *S. mochisa* were compared with those of the type species of *Scolecocampa*, *Scolecocampa liburna* Geyer, and were found to be congeneric. After comparison with other genera of catocalines, I discovered that *Saccharophagos* is a new synonym of *Scolecocampa*.

To facilitate the identity of *S. mochisa*, I redescribe the adult and present illustrations of the male and female genitalia, SEM images of the egg, a redescription and illustrations of the larva, and a description and illustrations of the pupa.

This species has been considered a minor pest in the past, but a reevaluation of its pest status is needed. The larva feeds on dead sugarcane stalks, new shoots, and millable stalks (Méndez Lopez, personal communication).

Scolecocampa stygialis (Smith) New Combination

Eucalyptra stygialis Smith 1903: 219; Todd, 1982: 201.

Gabara stygialis Barnes and McDunnough 1917: 88; McDunnough 1938: 126; Franclemont and Todd 1983: 123; Poole 1989: 454; Poole and Gentili 1996: 746.

This species probably was placed in *Gabara* because of the horizontal forewing bar present in some forms of the type species, *Gabara subnivosella* Walker. The

genitalia of both sexes are morphologically similar with *Scolecocampa* species.

Scolecocampa mochisa (Schaus) New Combination

Saccharophagos mochisa Schaus 1923: 164; Crumb 1956: 329. (Figs. 1-7)

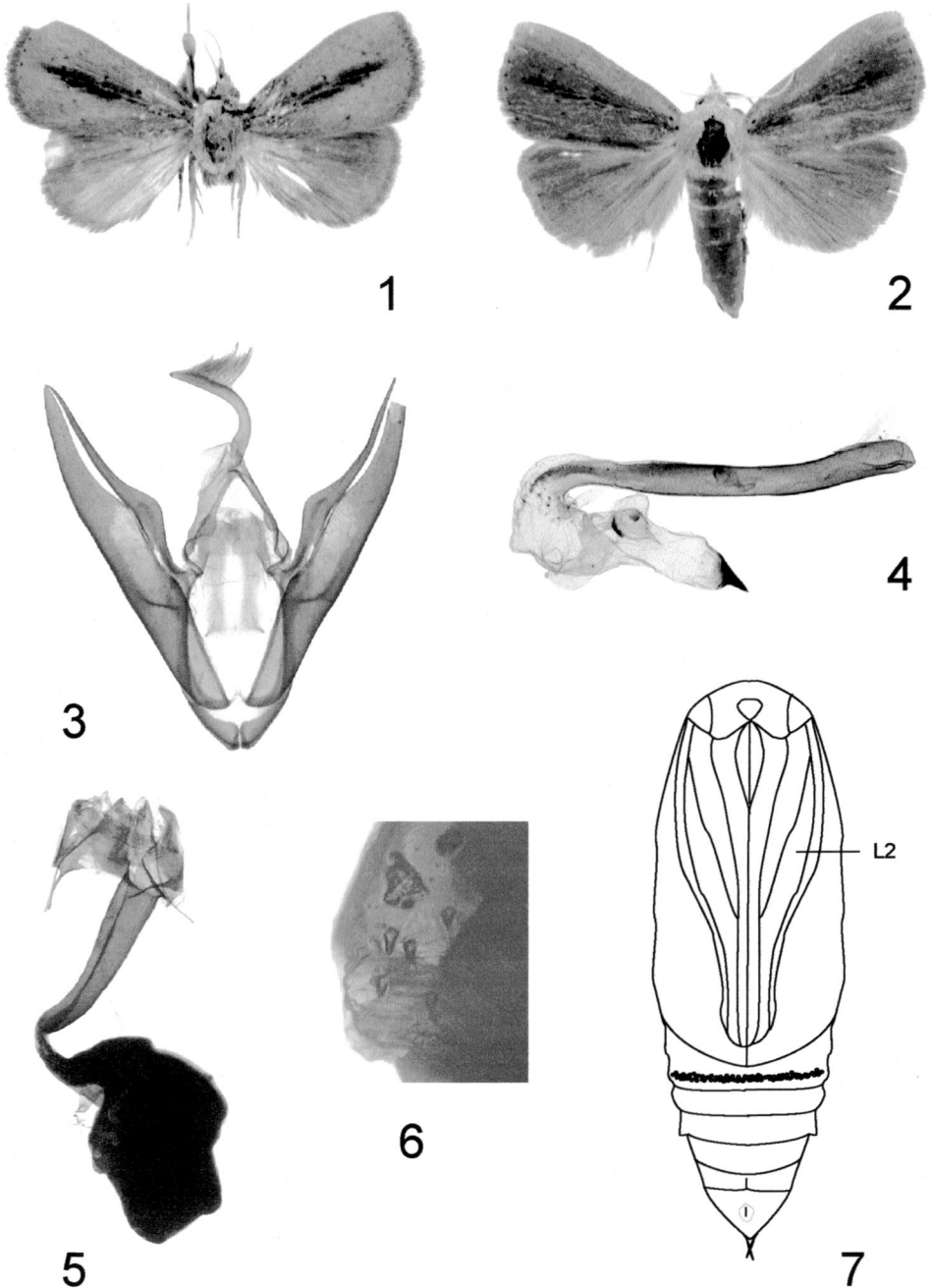
Diagnosis. This species most closely resembles *S. stygialis*. The horizontal dark line of the forewing is much larger in *S. mochisa* than in *S. stygialis*. In the male genitalia, the dorsal arm of the valve extends slightly past the apex of the ventral arm in *S. mochisa*, and in *S. stygialis* the dorsal arm is shorter than the ventral arm. The apical cornutus is larger in *S. mochisa* than in *S. stygialis*.

Description. Adult Male. (Fig. 1). *Head.* Frons with hairlike scales forming a triangular tuft in profile with scales becoming progressively longer toward dorsum, scales brown basally with longest scales beige; vertex with beige spatulate scales mixed with a few brown ones; scape white, antenna white scaled dorsally; labial palp brown, porrect, elongate, length more than twice eye diameter, middle segment with ventral scales progressively longer from base toward apical segment, which is distinct.

Thorax. Patagium beige to light brown with scattered brown spatulate scales; tegula and mesothorax with light brown hairlike scales; metathorax with beige spatulate scales and two baso-lateral tufts of hairlike scales; proleg brown with ventral fringe of femur becoming progressively shorter toward apex, tibia with expanded scales resulting in a wedge shape viewed dorsally, tarsi without apical rings; middle and hind-legs brown. Underside with white spatulate scales and light brown hairlike scales.

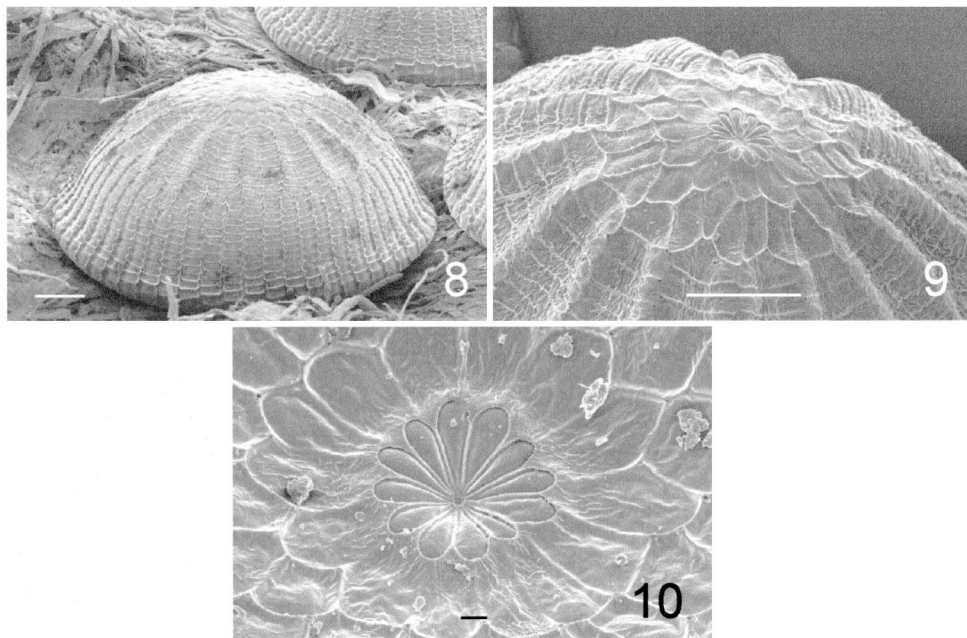
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[Identity of a sugar cane pest, *Scolecocampa mochisa* (Schaus), in Mexico...] Ms. Submission



Figs. 1-7. *Scolecocampa mochisa* adult. (1) male, Sinaloa, Culiacan, June 1999. (2) female, Sinaloa, Culiacan, June 1999. (3) male genitalia, USNM genitalia slide #46631. (4) male aedeagus, USNM genitalia slide #46631. (5) female genitalia, USNM genitalia slide #46634. (6) signa of female genitalia, USNM genitalia slide #46634. (7) female pupa (L2 = middle leg).

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Figs. 8–10. *Scolecocampa mochisa* egg. (8) general view (scale = 100 μ m). 9, apex of showing micropylar region (scale = 100 μ m). 10, detail of micropyle (scale = 10 μ m).

Forewing. Length, 17–18 mm; ground color brown; fuscous spot at base of wing on R vein; variably distinct horizontal fuscous band from base to beyond postmedial line; median line consists of a few fuscous indistinct dots; postmedial line a series of small fuscous dots curving from apex of discal cell to posterior margin; a series of small fuscous dots at ends of cells along outer margin; fringe brown.

Hindwing. Ground color brown; fringe brown. Underside slightly lighter brown than upperside with small fuscous spot in middle of discal cell.

Abdomen. Dorsum brown; several apical segments with a mixture of brown and light brown scales in basal half, distal half fuscous.

Genitalia (Figs. 3–4). Uncus curved in basal third; width constant; apex rounded, with slight hook. Valve bifurcate; dorsal arm slender with enlarged bulge at basal third; editum present on this bulge; remainder of dorsal arm narrow to pointed, slightly decurved apex; length slightly longer than ventral arm; ventral arm wider than dorsal; width constant to 0.6 length then tapers to pointed apex; limit of sacculus defined by distinct ridge at basal third of ventral arm. Juxta elongate rectangle, membranous medially. Aedoeagus elongate, slightly curved in basal third; fine dorsal patch of spicules apically; dorsal sclerotized ribbon extending onto vesica with small thick spines. Vesica curves ventally; dorsal diverticulum with two sclero-

tized spiculate patches of different size; apical cornutus large sclerotized spine.

Adult Female. (Fig. 2). Essentially as described for male except

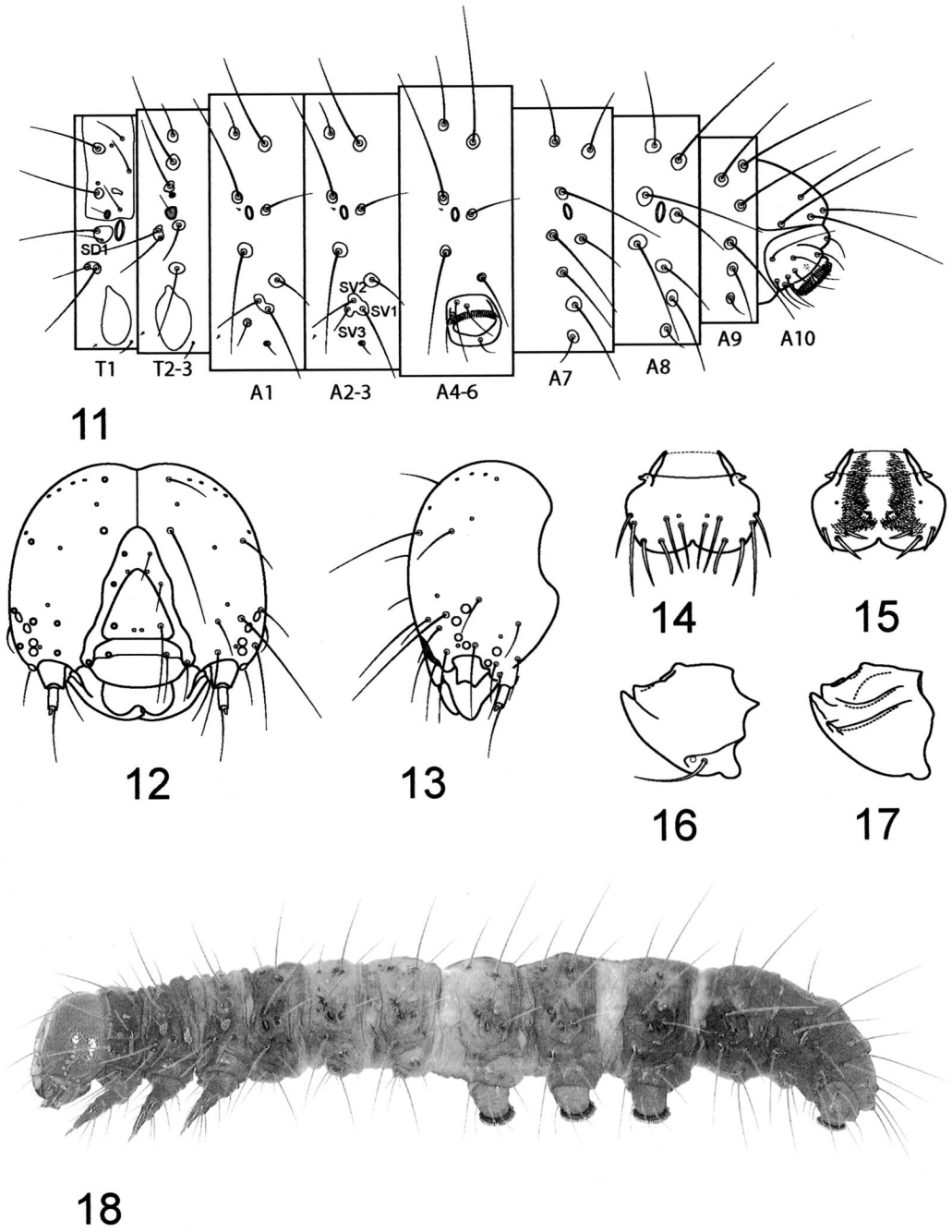
Forewing. Length, 15–18 mm.

Genitalia. (Figs. 5–6). Papillae anales with setose surface lateral, dorsal edge slightly concave. Ductus bursae heavily sclerotized, elongate. Corpus bursae ovate. Signa medial band of spines.

Egg. (Figs. 8–10). Dome shaped with prominent basal collar. Surface with longitudinal ridges running from just below micropyle to base. Between these ridges, smaller and finer longitudinal ridges form rectangular cells. Aeropyles present at intersection of these ridges. Micropyle surrounded by 12 petal-like cells. Two rows of irregular shaped longitudinal rectangles between micropyle and rectangular cells.

Larva. (Figs. 11–18). Head brown with light sculpturing and no pattern; labrum with six pairs of setae dorsally; mandible with one prominent tooth, a small adjacent tooth, a toothless ridge, and a small dorsal tooth. General body color brown; pinacula well developed and dark brown; no pattern present. Setae elongate. T2 and T3 with SD1 a fine seta, much finer than surrounding setae. A2–3 with 3 SV setae. Prolegs present on A4–6 and 10, absent on A3. Crochets elongate, slender, ≈ 30 on each proleg.

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Figs. 11-18. *Scolecocampa mochisa* larva. 11, Setal map. 12, Head. 13, Head, lateral view. 14, Labrum, dorsal view. 15, Labrum, ventral view. 16, Mandible, dorsal view. 17, Mandible, ventral view. 18, Habitus.

Pupa. (Fig. 7). Labial palp present, well developed. Profemur absent. Middle leg not reaching eye. Wings do not extend beyond caudal margin of segment 4. Cephalad margin of segments 4–6 with shallow circular pits on dorsum; cephalad margin of segment 4 with shallow pits ventrally. Cremaster with two slightly curved spines. (From a cast pupal case.)

Type Material. The holotype male of *Saccharophagos mochisa* Schaus is in good condition, but poorly spread. The antennae, abdomen, and one hindleg are missing. A pupal case in poor condition and one hindleg are in a gelatin capsule mounted separately. The following labels are attached: (1) Los Mochis, Sinaloa, Mex.; (2) R. H. Van Zwaluwenberg; (3) Acc. 87; (4) 3; (5) Type No., 26486, U.S.N.M. [Red label]. Type locality: Los Mochis, Sinaloa, Mexico.

Material Examined. 1 male, 4 females. MEXICO: Sinaloa: Los Mochis, 1 female; Culiacan, June 1999, cána azúcar, G. Vejar C., 1 male, 1 female; Jalisco: Autlan, El Mentidero, 2 females.

Distribution. *Scolecocampa mochisa* is so far known only from the west coast of Mexico.

Discussion

The forewing ground color in the holotype is intermediate to the lighter brown ground color of the specimens from Culiacan. The specimens from Jalisco are the darkest. The horizontal fuscous band is distinct in the lighter specimens and less so in the darker specimens.

The original type material was reared from sugar cane, where the larva fed on dry tissue of cane butts confined to a single internode (Schaus 1923). In 1999, I received a letter indicating that this was a new pest of sugar cane in Mexico and that the larvae were stem borers (Bautista Martínez, personal communication). In 2000, the insect appeared again, this time from Jalisco and reared from sugar cane.

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